## An Empirical Study on the Influence of Online Service Quality on Customer Satisfaction: A Study of Royal Jordanian Airline

Rukana Ghalib M. Alshweesh

Department of Management Information System

Faculty of Business Administration and Economics

Al-Hussein Bin Talal University

Basel J. A. Ali

School of Business Innovation & Technopreneurship

University Malaysia Perlis

## Abstract

The aims of this paper is to examine the relationships of online service quality dimensions with customers' satisfaction towards e-ticket system in Royal Jordanian Airlines. The proposed instrument dimensions are identified based on a questionnaire survey conducted in Jordan. Based on an extensive review of literature, this paper proposed five dimensions for measuring online service quality on customer satisfaction. The results show significant relationships among the online service quality dimensions (Responsiveness, Contact, Efficiency and privacy), and customer satisfaction. The results are important to enable managers to have a better understanding of the key online service quality dimensions that influence customer satisfaction. The primary limitations of this research are the scope and size of its sample.

Keywords: online service quality, Responsiveness, Compensation, Contact, Efficiency and privacy and customer satisfaction

## 1. INTRODUCTION

With fast growth of the Internet and or the globalization of the market, most enterprises are trying to get more customers in competitive electronic market. Electronic service which known as (e-service) is becoming very important not only in determining the success of electronic commerce or failure of e-commerce application, but also in providing customers with a convenient service booking channel with interactive information flow in the transaction process (Li & Suomi, 2007; Santos, 2003).

Airline digital commerce market is considered one of the quick growing industries within the global. Airline industry's ticket distribution channel is changed to e-ticketing. This distribution channel offers customers to buy ticket rapidly and it has a cost saving for each company and customers (Chen, 2007).

As an end result, companies have worked diligently to broaden new methods for interfacing with customers. important to this method has been the improvement of e-tickets (Borthick & Kiger, 2003; Qteishat, Alshibly, & Al-ma'aitah, 2014). As we noted that, e-tickets can be used by a wide range of companies or organizations to provide services including coupons for e-shopping, to tickets (Tripathi, Reddy, Madria, Mohanty, & Ghosh, 2009). even though it isn't honest to argue that e-tickets have turn out to be ubiquitous, it is evident that the proliferation of e-tickets represents an exchange inside the way that traditional ticket buying occurs (Bukhari, Ghoneim, Dennis, & Jamjoom, 2013).

further, the cognitive factors of e-ticketing have grow to be such an essential issue of situation for organizations in current years as efforts to make bigger e-ticketing progress (López-Bonilla & López-Bonilla, 2013). especially, the issue of customer satisfaction in e-ticketing has emerge

as an important issue of attention, prompting companies to research the particular variables that from customer results when selecting e-ticketing options (Wei & Ozok, 2005).

When you consider that a very good service quality is an essential side in any electronic service either in public or non-public sector to make sure customer satisfaction, this study will look further the online service quality dimensions on e-ticket system as perceived by means of Royal Jordanian customers. Several online service quality dimensions from selected online service quality models which might be appropriate with this study can be used to examine primary on-line service quality dimensions that result in customers' satisfaction towards e-ticket system in Royal Jordanian airlines. Eventually, the usage of those on-line service quality dimensions, this study will evaluate the relationships of each dimension a with customers' satisfaction toward e-ticket system in Royal Jordanian airlines. Royal Jordanian was established and started operations in 1963 as Alia, the Royal Jordanian Airline(Barakat, 2012). The airline was later renamed Royal Jordanian in 1986. Royal Jordanian is headquartered in the capital, Amman, and its flights are operated from Queen Alia International Airport (QAIA) in Amman. The results from this research would assist airline managers to better serve their customers, monitor and develop E-Service quality to achieve the highest level of their passengers'' satisfaction. While Ali argued in his study service quality is an important IS success factor for organizational performance (Ali, Omar, & Bakar, 2016).

The paper explores online service quality dimensions based on a review of the development of e-service quality dimension. It proposes a five-dimension scale for measuring eservice quality as the following: Responsiveness, Compensation, Contact, Efficiency and privacy.

## 2. RESEARCH OBJECTIVES

The main objective of this study is to examine the relationship between online service quality dimensions with customers' satisfaction towards e-ticket system. In summary, the specific objectives of this study are as follows:

2.1 To examine the relationship between Responsiveness and customers' satisfaction towards e-ticket system in Royal Jordanian Airlines.

2.2 To examine the relationship between Compensation and customers' satisfaction towards e-ticket system in Royal Jordanian Airlines.

2.3 To examine the relationship between Contact and customers' satisfaction towards e-ticket system in Royal Jordanian Airlines.

2.4 To examine the relationship between efficiency and customers' satisfaction towards e-ticket system in Royal Jordanian Airlines.

2.5 To examine the relationship between privacy and customers' satisfaction towards e-ticket system in Royal Jordanian Airlines.

#### **3. RESEARCH QUESTION**

3.1 Is there a significant relationship between Responsiveness of online service quality on customer satisfaction towards e-ticket system in Royal Jordanian Airlines?

3.2 Is there a significant relationship between Compensation of online service quality on customer satisfaction towards e-ticket system in Royal Jordanian Airlines?

3.3 Is there a significant relationship between Contacts of online service quality on customer satisfaction towards e-ticket system in Royal Jordanian Airlines?

3.4 Is there a significant relationship between efficiency of online service quality on customer satisfaction towards e-ticket system in Royal Jordanian Airlines?

3.5 Is there a significant relationship between privacy of online service quality on customer satisfaction towards e-ticket system in Royal Jordanian Airlines?

## 4. LITERATURE REVIEW

After the in-depth take a look at of literature overview, the researcher concluded that numerous dimension of service quality will be used to determine the relationship among service quality and customer satisfaction.

quality is described as the ability of goods or services fulfilling the necessities and expectations of a client (Erkut, 1995). The understanding of IS service quality impact can be gotten from the firm's service quality which make strong impact on the firm performance (Ali, Bakar, & Omar, 2016).E-service quality or Web site service quality were initially described by (Zeithaml, Parasuraman, & Malhotra, 2000) also e-service quality could be described as the measure of efficient and effective shopping of web site activities, procurement and the delivery of the product and services (Parasuraman, Zeithaml, & Malhotra, 2005). nowadays digital services are found out by diverse digital methods which includes the internet, mobile smartphone, personal laptop, POS, credit card, ATM and smart card (Kumbhar, 2012). Currently e-service has turn out to be famous within the world with the proliferation of the internet, but the principle and practice of e-service remains in its infancy (Santos 2003).

The literature regarding the measuring and conceptualization of e-service quality is quite various and lacks consensus (Chen, Tsai, Hsu, & Lee, 2013). As with many different e-services, the adoption level of internet banking services in developing countries is fantastically low compared to developed countries (Ali & Omar, 2016b). An overview of the literature analysing the definitions of e-ticketing which have been mentioned demonstrates efforts to explicate the full spectrum of e-ticketing for each the consumer and the organization. as an instance, define an e-ticket as "a paperless digital document used for ticketing travellers, particularly within the commercial airline industry" (Alfawaer, Awni, & Al-Zoubi, 2011). in addition define e-ticketing as a procedure of maintaining document of sales, usage tracking and accounting for a passenger's transport without a requirement for a paper 'cost document (Sorooshian, Onn, & Yeen, 2013).

#### 4.1 ONLINE SERVICE QUALITY DIMENSIONS

According to the popular citation (Parasuraman et al., 2005) ES-QUAL dimensions web sites have measured the quality level of service and their dimensions are as follows;

First one is Efficiency: which Measures the usage of the site, access speed and facilitation.

Second one is Fulfilment: which Consists of the dimensions of the fulfilment of the services and goods executed and delivered by the site.

Third one is System Availability: which contains the appropriate technical functions of the site. Fourth one is Privacy: which is Involves the level of protection provided by the site in terms of customer and information security.

Also According to (Parasuraman et al., 2005) ERecS-QUAL web sites have measured the quality level of service correction and their dimensions are as follows;

First one is Responsiveness: Measures the ability to handle problems effectively and provide feedback through the site.

Second one is Compensation: Measures the level of compensation to customers because of problems. Third one is Contact: Measures the ability to support through telephone or online customer representatives.

(Zeithaml, Parasuraman, & Malhotra, 2002) have used seven different service quality dimensions in his study. His main focus was on efficiency, reliability, fulfillment, privacy, responsiveness, compensation and contact. Based on literature review, different authors use different dimensions of service quality to prove their studies.

The findings by Ali study demonstrated that efficiency of online service quality and Responsiveness of online service quality have significant and positive influence on customer satisfaction in the commercial banking industry in Jordan (Ali & Omar, 2016a).

After doing literature review I have come out with five major dimensions of service quality that are Responsiveness, Compensation, Contact, efficiency and privacy.

#### A. Responsiveness

Responsiveness described as the willingness or readiness of employees to provide service. It involves timeliness of services (Parasuraman, Zeithaml, & Berry, 1985).

One more definition for Responsiveness is the ability of e-retailer to provide appropriate information to customers when problem occurs and the willingness of the company to help customers and provide prompt service(Zeithaml et al., 2002).

#### **B.** Compensation

Compensation which is Measures the level of compensation to customers because of problems According to Parasuraman, Zeithaml, & Malhotra (2005).

## C. Contact

According to Parasuraman, Zeithaml, & Malhotra (2005) Contact which Measures the ability to support through online customer representatives .

## **D.** Efficiency

Efficiency described as customer's ability to effectively access the website, find their desired product and related to information and check it out with minimal effort (Zeithaml et al., 2002).

## E. privacy

The privacy dimension includes assurance that shopping behaviour data are not shared and that credit card information is secured (Zeithaml et al., 2002). Privacy is the condition whether the customer personal information is not shared and their credit card or payment method information is secure (Zeithaml et al., 2002).

## 4.2. HYPOTHESIS AND RESEARCH FRAMEWORK OF THE STUDY:

In this research, we used to SERVQUAL for measurement of e-Service Quality towards e-ticket system in Royal Jordanian Airlines. In finally, authors used five variables as independent variable and one as dependent variable for survey. This study proposes the following hypothesis.

1) There is a positive relationship between Responsiveness of online service quality and customer satisfaction.

2) There is a positive relationship between Compensation of online service quality and customer satisfaction.

3) There is a positive relationship between Contact of online service quality and customer satisfaction.

4) There is a positive relationship between efficiency of online service quality and customer satisfaction.5) There is a positive relationship between privacy of online service quality and customer satisfaction.

## **RESEARCH FRAMEWORK OF THE STUDY**



## 5. THE RESEARCH METHODOLOGY

This study covers a sample of 300 respondents and the survey was conducted at Jordan for the customers of the Royal Jordanian Airlines. Sampling is done by randomly selected passengers. A structured questionnaire was used for data collection. The questionnaire was divided into five sections, the first section reveals the demographic profile of respondents, second, third, fourth, fifth reveals for service quality dimensions and the last section for customer satisfaction.

The questions were phrased in the form of statements scored on a 5-point Likert type scale, ranking from 1 "highly dissatisfied" to 5 "highly satisfied".

To examine the relationships of online service quality dimensions with customers' satisfaction towards e-ticket system in Royal Jordanian Airlines by using the partial least squares (PLS) technique, Smart PLS was adopted to assess the measurement and structural model(Ringle, Wende, & Will, 2005). PLS analysis was chosen because it can evaluate all paths at the same time and does not need a large sample size (Gefen, Straub, & Boudreau, 2000). To assess the associations, all measurement items were standardized and missing values were substituted by sample means to check validity, reliability, and statistical power. The bootstrapping technique was used, which approximates the estimator sampling distribution by resampling with substitution from the original sample (Moore, McCabe, & Evans, 2005) to acquire more consistent results.

#### **Population and Sample**

The population of this research was the passengers of Royal Jordanian who have flight experience with Royal Jordanian.

Total of 300customer from Royal Jordanian in Jordan had been asked to answer the questionnaire. After the process of screening, 137 or 45.7% of the participants involved in this research were eligible and can be regarded as respondents. However, after screening the data, only 137 survey questionnaires can be utilized for this research. Therefore, the response rate is adequate for analysis of Smart PLS.

#### **Data Collection and Analysis**

Data Collection: This research was using both primary and secondary data to achieve the accuracy and precision of the research's findings. Collecting data method was used to identify the various information and sources which used in the research.

Primary Data: Primary data was derived from the independent variables and dependent variables. The independent variables in this study is online service quality (Responsiveness, Compensation, Contact, efficiency and privacy), whereby the dependent variable in this study is customer satisfaction. Other than that, questionnaire forms were distributed to passenger of Royal Jordanian airline.

Secondary Data: Secondary data included theory, definitions, facts, statistics, reports and opinions from the previous research that have been conducted. In this research, secondary data was used in constructing the proposed model framework and form its relationships with the service quality towards customer satisfaction. There are some media that can be used as secondary data such as journals, magazines, newspaper, internet, reference books and archival records. Secondary data can be got, quickly, fast and easily compared to primary data and it is less costly than primary data.

In this part of the research, the fitness of measurement models has been evaluated and the validity and reliability of the instruments of the study is investigated and interpreted. In the following, the fitness of structural model and then, the overall fitness of the model are examined and the hypotheses are finally tested.

## Measurement models:



**Figure 1 PLS Measurement Model** 

### Reliability

In this research, to evaluate the reliability of the survey questionnaire, three criteria of factor loading coefficients, Cronbach's alpha and composite reliability have been used that each is addressed in detail in the following and their results are interpreted and reported.

#### Cronbach's alpha

In this research, Cronbach's alpha related to Responsiveness, Compensation, Contact, Efficiency and privacy has been separately calculated whose results are seen in Table 1.

Table 1 Cronbach's alpha coefficients:

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
CS	0.877	0.879	0.901	0.505
Com	0.739	0.753	0.824	0.486
Con	0.766	0.838	0.835	0.505
Eff	0.823	0.856	0.873	0.580
Res	0.663	0.715	0.793	0.493
pri	0.588	0.634	0.781	0.547

Given that the proper value of Cronbach's alpha is Alpha values of more than 0.5 are generally considered acceptable and values of more than 0.6 satisfactory. And as it is seen in Table 2, the value obtained for most of variables is more than 0.6, so, it can be note that the reliability is acceptable and satisfactory.

### Composite reliability

Composite reliability for each variable is observed in Table 2.

Table 2. Composite reliability for each variable:

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
CS	0.901	0.900	0.014	64.955	0.000
Com	0.824	0.819	0.020	40.393	0.000
Con	0.835	0.830	0.018	47.625	0.000
Eff	0.873	0.868	0.018	47.263	0.000
Res	0.793	0.787	0.030	26.218	0.000
pri	0.781	0.773	0.038	20.786	0.000

Given that the proper value of composite reliability is 0.7 (Nunnally, 1978) ,and according to the results of Table 3, the value obtained for all variables is more than 0.7, therefore, it can be said that the reliability is good.

#### **Convergent validity**

Average Variance Extracted (AVE) from the variables is applied to evaluate convergent validity. AVE for each study variable is given in Table 3.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
CS	0.505	0.504	0.037	13.640	0.000
Com	0.486	0.481	0.031	15.893	0.000
Con	0.505	0.499	0.029	17.227	0.000
Eff	0.580	0.572	0.037	15.587	0.000
Res	0.493	0.490	0.040	12.444	0.000
pri	0.547	0.541	0.045	12.118	0.000

Table 3. Average variance extracted from the variables.

Given that the proper value of AVE is 0.4 (Magner, Welker, & Campbell, 1996) and according to the results of Table 4, the value obtained for all variables is more than 0.5, therefore, it can be said that the convergent validity is good.

## **Predictive Relevance** (Q<sup>2</sup>)

Models with acceptable fitness for structural part should have the predictive power of indexes related to endogenous structures of the model. On the severity of the predictive power of the model in endogenous structures. The following 0.02, 0.15 and 0.35 indicating the weak, medium and strong predictive power of a structure, respectively for the indicators of the structure(Henseler, Ringle, & Sinkovics, 2009). Table 5 shows the values of Q2 for each endogenous variable of the model.



Table 4. Predictive Relevance $(Q^2)$ :
Predictive Relevance (Q2)

0.185



According to the values obtained for Q2 for endogenous variables of internet banking service quality and customer satisfaction equal to 0.185, the medium capabilities of internet banking service quality and customer satisfaction are confirmed.

#### **Discriminant Validity**

Table 5. Discriminate Validity test based on fornell-larcker Criterion

	CS	Com	Con	Eff	Res	pri
CS	0.711					
Com	0.368	0.697				
Con	0.426	0.490	0.711			
Eff	0.411	0.350	0.359	0.762		
Res	0.482	0.316	0.334	0.296	0.702	
pri	0.376	0.242	0.197	0.260	0.254	0.740

Table 5. Showed that the values of square root of AVE for each construct are higher in that particular diagonal and it indicates good discriminant validity.

## **Structural Model**



Figure 2 PLS Structural Model

In the structural model of PLS analysis, hypotheses testing can be done. Here the path coefficient, t statistics, average estimate and error are considered. Table 7 showed the structural model for hypothesis testing. Figure 2 also shows the PLS structural model output.

Table 6: Structural model output

	Path Coefficient)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	
Com -> CS	0.071	0.083	0.073	0.973	0.331	
Con -> CS	0.190	0.190	0.081	2.344	0.019	
Eff -> CS	0.179	0.179	0.073	2.457	0.014	
Res -> CS	0.292	0.305	0.067	4.387	0.000	
pri -> CS	0.201	0.202	0.075	2.688	0.007	

## Hypothesis Testing and Results

#### **First hypothesis:**

**There is a positive relationship between Responsiveness of online service quality and customer satisfaction** The results of table indicate that the coefficient of the responsiveness influence is meaningful on customer satisfaction 0.292 the corresponding t statistics is 4.387 at level of p<0.000. Therefore responsiveness has strong positive and meaningful influence on customer satisfaction therefore the first hypothesis is confirmed.

#### Second hypothesis:

There is a positive relationship between Compensation of online service quality and customer satisfaction. The results of table indicate that the coefficient of the Compensation influence is meaningful on customer satisfaction 0.071 the corresponding t statistics is 0.973 at level of p<0.331. Therefore Compensation has negative influence on customer satisfaction therefore second hypothesis is rejected.

#### Third hypothesis:

#### There is a positive relationship between Contact of online service quality and customer satisfaction.

The results of table indicate that the coefficient of the Contact influence is meaningful on customer satisfaction 0.190 the corresponding t statistics is 2.344 at level of p<0.019. Therefore Contact has strong positive and meaningful influence on customer satisfaction therefore the third hypothesis is confirmed. **Fourth hypothesis:** 

# **There is a positive relationship between efficiency of online service quality and customer satisfaction.** The results of table indicate that the coefficient of the efficiency influence is meaningful on customer satisfaction 0.179 the corresponding t statistics is 2.457 at level of p<0.014. Therefore efficiency has strong positive and meaningful influence on customer satisfaction therefore the fourth hypothesis is confirmed.

#### Fifth hypothesis:

#### There is a positive relationship between privacy of online service quality and customer satisfaction.

The results of table indicate that the coefficient of the privacy influence is meaningful on customer satisfaction 0.201 the corresponding t statistics is 2.688 at level of p<0.007. Therefore privacy has strong positive and meaningful influence on customer satisfaction therefore the fifth hypothesis is confirmed.

#### Conclusion

The aims of this study was to examine the relationships of online service quality dimensions with customers' satisfaction towards e-ticket system in Royal Jordanian Airlines. In particular, five hypotheses were postulated. To test the proposed hypotheses, data were collected from passengers of Royal Jordanian Airlines in Jordan. The empirical results supported the four posited research hypotheses in a significant way. While one hypotheses although was insignificant.

Important to note about the study findings is the fact that Responsiveness of online service quality has the strongest influence on customer satisfaction and followed by privacy, Efficiency, Contact of online service quality on customer satisfaction. Compensation of online service quality which were found to be negatively related to customer satisfaction.

## 6.3 LIMITATIONS AND FUTURE RESEARCH

There were several limitations met in this research that should be considered. The limitation was discussed in order to stipulate the limitations and to recognize anticipated possibilities for future research. Firstly, the sampling frame for this study is limited to the passengers of Royal Jordanian Airlines in Jordan. The primary limitations of this study are the scope and size of its sample.

Further research can be performed with similar concepts in different areas of service industry (banking industry, insurance companies or may be telecommunication industry) to better generalize the results.

Future research ought to apply more comprehensive approach by making a comparative analysis of two Airline, thereby taking into consideration the same aspects of study.

#### REFERENCES

- Alfawaer, Z. M., Awni, M., & Al-Zoubi, S. (2011). Mobile e-ticketing reservation system for Amman International Stadium in Jordan. *International Journal of Academic Research*, 3(1), 848-852.
- Ali, B., & Omar, W. A. W. (2016a). Relationship between E-Banking Service Quality and Customer Satisfaction in Commercial Banks in Jordan. American Based Research Journal, 5(12), 34-42.
- Ali, B., & Omar, W. A. W. (2016b). Role, Challenges and Benefits of Electronic Banking Service in Jordan. American Based Research Journal, 5(12), 43-46.
- Ali, B. J., Bakar, R., & Omar, W. A. W. (2016). The Critical Success Factors of Accounting Information System (AIS) And It's Impact on Organisational Performance of Jordanian Commercial Banks. International Journal of Economics, Commerce and Management, United Kingdom, IV(4), 658-677.
- Ali, B. J., Omar, W. A. W., & Bakar, R. (2016). Accounting Information System (AIS) and Organizational Performance: Moderating Effect of Organizational Culture. *International Journal of Economics, Commerce and Management* , *United Kingdom, IV*(4), 138-158.
- Barakat, N. (2012). Arab Passengers'airlines Framework and Performance: Jordan Case *The Economic Research Forum* (*ERF*) (Vol. Working Paper 727).
- Borthick, A. F., & Kiger, J. E. (2003). Designing audit procedures when evidence is electronic: The case of e-ticket travel revenue. *Issues in Accounting Education*, 18(3), 275-290.
- Bukhari, S., Ghoneim, A., Dennis, C., & Jamjoom, B. (2013). The antecedents of travellers'e-satisfaction and intention to buy airline tickets online: a conceptual model. *Journal of Enterprise Information Management*, 26(6), 624-641.
- Chen, F. C.-Y. (2007). Passenger use intentions for electronic tickets on international flights. *Journal of Air Transport Management, 13*(2), 110-115.
- Chen, M.-H., Tsai, K.-M., Hsu, Y.-C., & Lee, K.-Y. (2013). E-service Quality Impact on Online Customer's Perceived Value and Loyalty. *China-USA Business Review*, 12(5).
- Erkut, H. (1995). Hizmet Kalitesi. İstanbul: İnterbank Publications(1).
- Gefen, D., Straub, D., & Boudreau, M.-C. (2000). Structural equation modeling and regression: Guidelines for research practice. *Communications of the association for information systems*, *4*(1), 7.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in international marketing*, 20(1), 277-319.
- Kumbhar, V. M. (2012). Conceptualization of E-services Quality and E-satisfaction: A Review of Literature. *Management Research and Practice*(4), 18-18.
- Li, H., & Suomi, R. (2007). Evaluating electronic service quality: a transaction process based evaluation model.
- López-Bonilla, J. M., & López-Bonilla, L. M. (2013). Self-service technology versus traditional service: Examining cognitive factors in the purchase of the airline ticket. *Journal of Travel & Tourism Marketing*, *30*(5), 497-508.
- Magner, N., Welker, R. B., & Campbell, T. L. (1996). Testing a model of cognitive budgetary participation processes in a latent variable structural equations framework. *Accounting and Business Research*, 27(1), 41-50.
- Moore, D. S., McCabe, G. P., & Evans, M. J. (2005). Introduction to the practice of statistics Minitab manual and Minitab version 14: WH Freeman & Co.
- Nunnally, J. (1978). C.(1978). Psychometric theory: New York: McGraw-Hill.
- Parasuraman, Zeithaml, V. A., & Malhotra, A. (2005). ES-QUAL a multiple-item scale for assessing electronic service quality. *Journal of service research*, 7(3), 213-233.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *the Journal of Marketing*, 41-50.
- Qteishat, M. K., Alshibly, H. H., & Al-ma'aitah, M. A. (2014). The Impact Of E-Ticketing Technique On Customer Satisfaction: An Empirical Analysis. JISTEM-Journal of Information Systems and Technology Management, 11(3), 519-532.
- Ringle, C. M., Wende, S., & Will, S. (2005). SmartPLS 2.0 (M3) Beta, Hamburg 2005.
- Santos, J. (2003). E-service quality: a model of virtual service quality dimensions. *Managing Service Quality: An International Journal, 13*(3), 233-246.
- Sorooshian, S., Onn, C. W., & Yeen, C. W. (2013). MALAYSIAN BASED ANALYSIS ON E-SERVICE. International Journal of Academic Research, 5(4).
- Tripathi, A., Reddy, T. S. K., Madria, S., Mohanty, H., & Ghosh, R. (2009). Algorithms for validating E-tickets in mobile computing environment. *Information Sciences*, *179*(11), 1678-1693.
- Wei, J., & Ozok, A. (2005). Development of a web-based mobile airline ticketing model with usability features. *Industrial Management & Data Systems*, 105(9), 1261-1277.
- Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2000). Conceptual Framework for understanding e-service quality: Implications for future research and managerial practice. ...
- Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002). Service quality delivery through web sites: A critical review of extant knowledge. *Journal of the Academy of Marketing Science*, 4(30), 362-375.